

MARCH 17, 2022

CTT @ DANSKE BANK
SMALL & MID CAP SEMINAR



S Y S T E M S





TORBJÖRN JOHANSSON
CEO

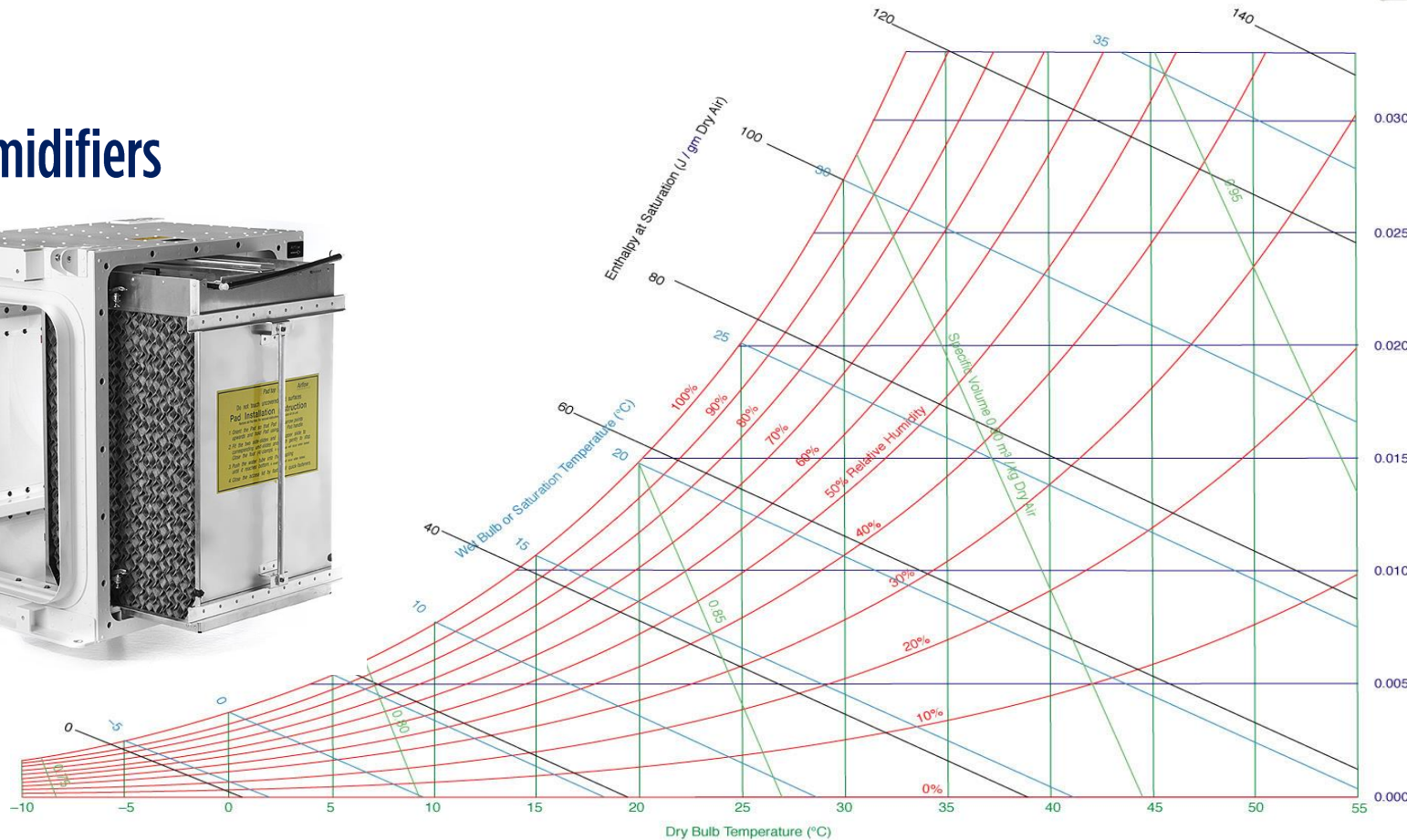


MARKUS BERG
CFO

Active Humidity Control in Aircraft

Passive means do not solve the root-cause of condensation / dry air

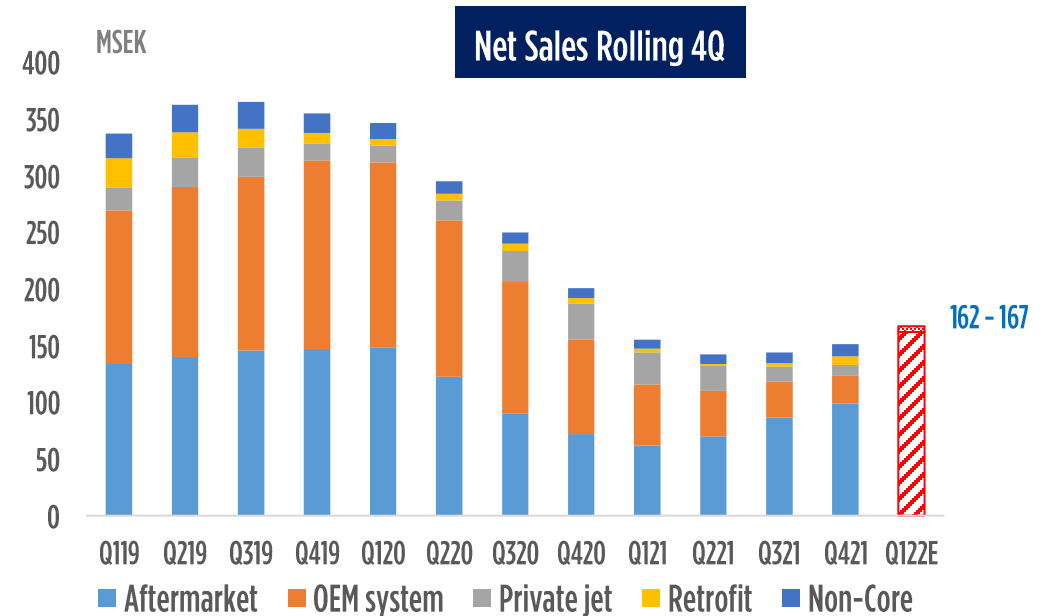
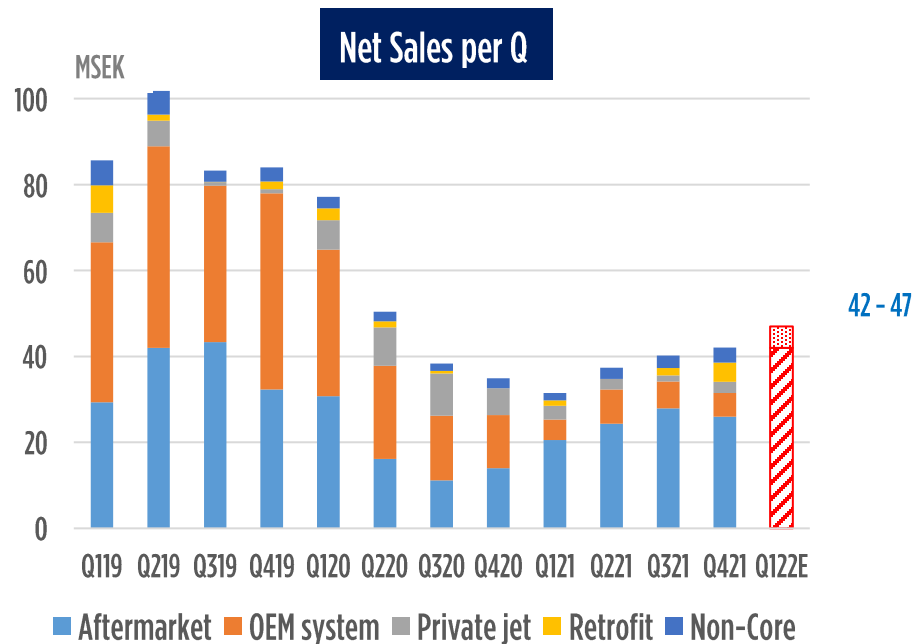
Humidifiers



De-Humidifiers

CTT is a smaller but stronger company

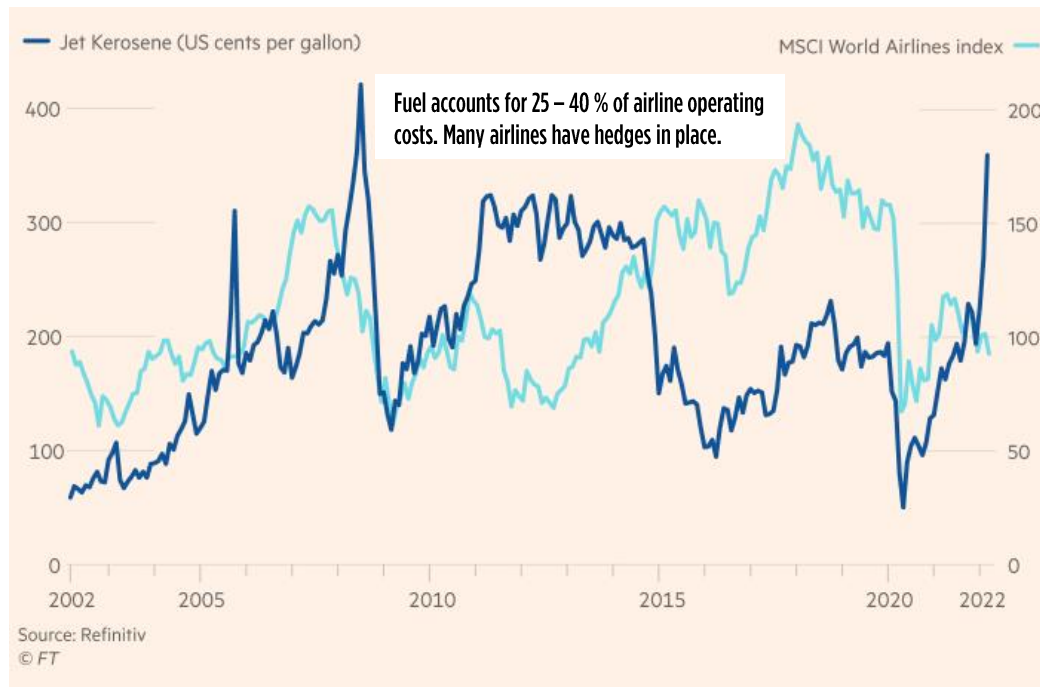
- ☐ Handled supply chain and deliverables in the pandemic
- ☐ Remained profitable – Continuous investments in projects
- ☐ Ready for turn-around and benefit from market drivers growing stronger in the wake of the pandemic



Rebounding air travel – but risk for ‘toxic war-cocktail’

Strong transatlantic traffic bookings – Implications of war likely to lower demand: uncertainty, higher inflation & less disposable income

- ❑ Fuel is 25 % - 40 % of OPEX for airlines - Many airlines are hedged and some can put on ticket surcharges to offset some pain
- ❑ Airspace closed and ‘unfriendly skies’ – redrawing air routes – adding costs to airlines and travel time for passengers – Middle-East carriers can benefit
- ❑ Supply constraints such as for titanium
 - ❑ Russia's VSMPO-AVISMA has 25% of global titanium market
 - ❑ Airbus relies on Russia for ½ of titanium needs and Boeing 1/3
 - ❑ Aerospace firms have built up inventories



CTT has **paused all shipments to Russia**

Facts - CTT in Russia:

- ☐ Percentage of CTT's total sales 2021: Approximately 4%
- ☐ Aftermarket sales <1MSEK
- ☐ No employees in Russia / Ukraine
- ☐ No suppliers in Russia / Ukraine

- ☐ All-fleet customer: 44 a/c fitted (10 in 2021)
- ☐ 20 a/c order in Q4 2021 scheduled for deliveries in 2022 – Valued to 14 MSEK based on list price
- ☐ (Opportunity: 20 more a/c scheduled to be added to Pobeda fleet in 2022 / 2023)

- ☐ OEM via Airbus A350
- ☐ 9 A350s delivered in total (7 in 2021 and 1 in 2022)
- ☐ Equipped with 2 humidifiers per aircraft

- ☐ Certified in Russia (Dec. 2021)
- ☐ Targeted EIS prior to war: H2 2022
- ☐ Flight deck humidifier basic equipment



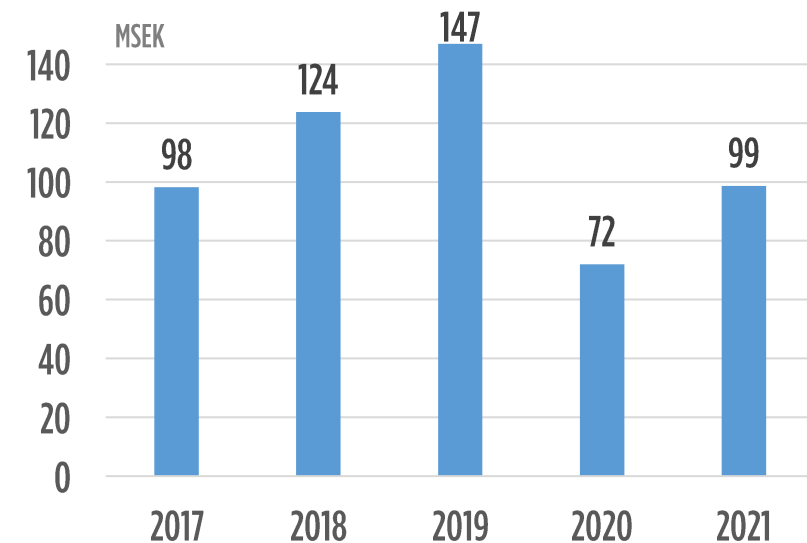
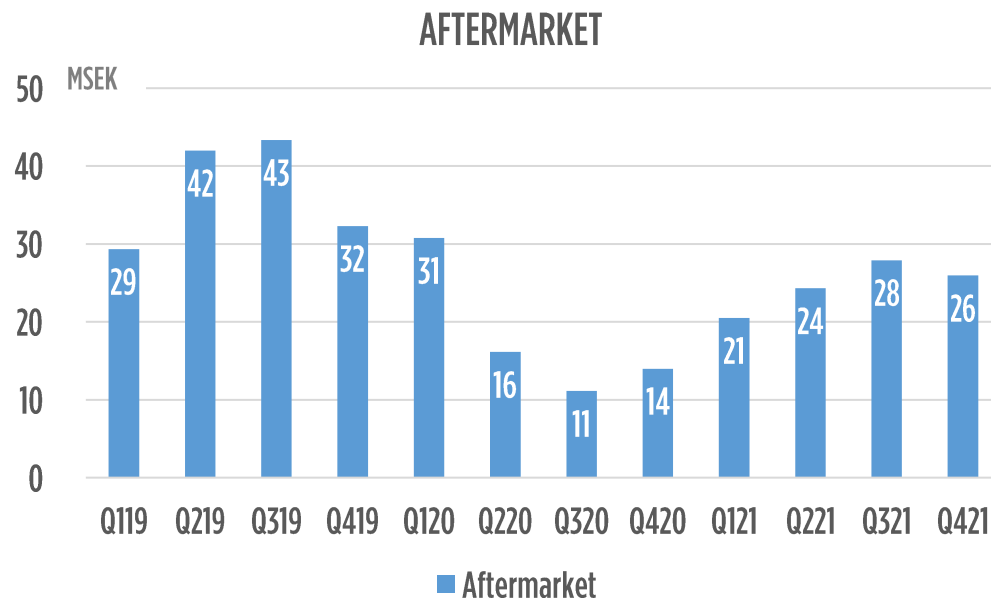
Aftermarket sales expected to increase in 2022

Q1 - Pause in upward trend - Omicron delaying rebound and growth a few months

- More products flying totally on A350 and Boeing 787 vs pre-pandemic
- Boeing 787 fleet restored to 99 % - high growth rate when 787 deliveries resume on 100+ ready-built inventory a/c
- A350 aftermarket higher in 2021 vs 2019 – continuous growth in 2022

Growth drivers going forward:

- Intercontinental flights - Longer flights - Higher utilization per aircraft (more flight hours)
- Population growth:
 - 110 Boeing 787 in inventory + build-rate 1-2 to 5
 - A350 fleet increasing - build-rate of 5 per month



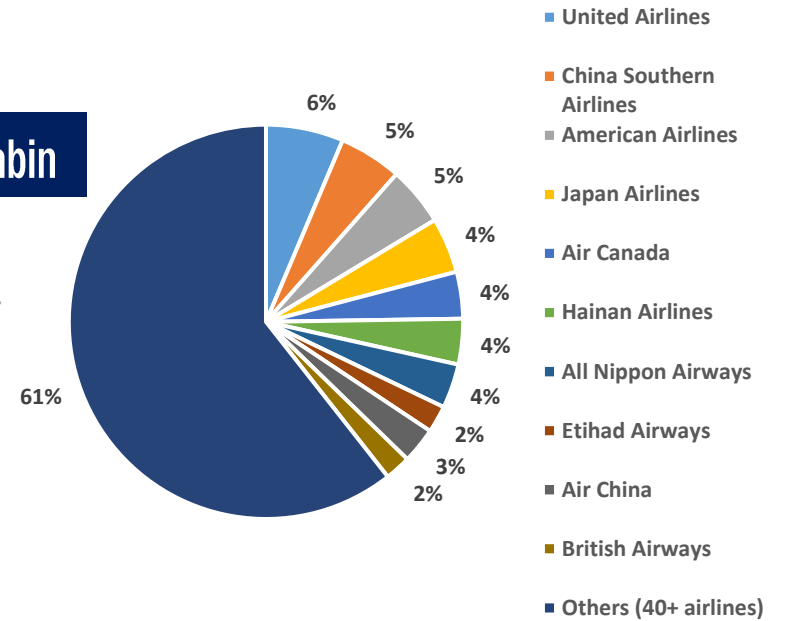
Diversified and global customer base

Commonality, experience and reliability drives demand - Airlines mirror and migrate to cabin

5 largest customers



Mirroring airlines



Air China's first A350 delivered in August 2018 mirroring its 787 fleet: Humidifiers in flight deck and both crew rests.



China Eastern's first A350 in November 2018 - Equipped as its 787-fleet with humidifiers in flight deck and both crew rests.



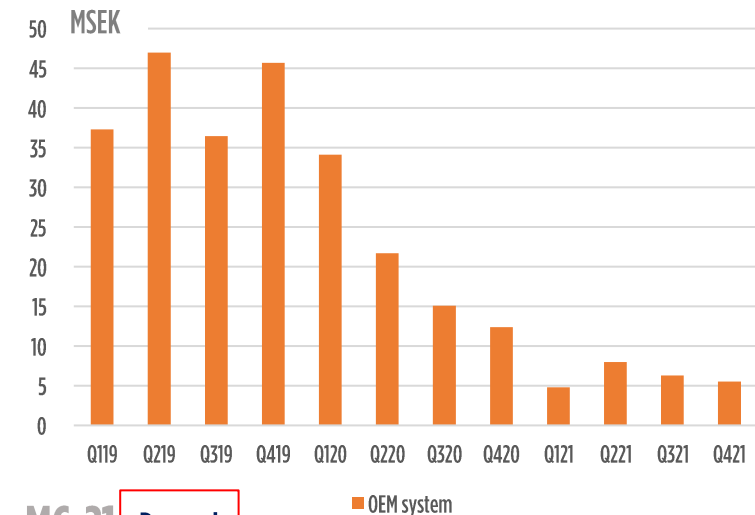
China Southern's first A350 in July 2019 - Mirroring its 787 fitting with humidifiers in flight deck and both crew rests **plus cabin**



OEM lagging but strong position when recovery starts

OEM not likely to significantly contribute to growth in 2022 – Boeing 787 issues take longer time than Boeing previously anticipated

- ❑ Boeing 787 at low build-rate (1 – 2 per month)
- ❑ Airbus currently targeting A350 build-rate to increase to 6 in 2023
- ❑ Boeing still expects to deliver first 777X in end-2023
- ❑ MC-21 type certificate in Dec 2021 – targeting entry-into-service in Q3 2022
- ❑ Aircraft production rates higher in H1 2023 – lead by A350



Boeing 787

- ❑ Awaiting regulatory approval for pre-delivery inspections on reworked aircraft in inventory
- ❑ Industry view for restarting 787-deliveries in April
- ❑ Meanwhile producing the 787 at a very low rate
- ❑ Expected gradual return to five airplanes per month over time

❑ Penetration at max – only more content (cabin humidifier) or higher production

Airbus A350

- ❑ Guided higher production rate in Q3 2022, up from 5 per month to 6
- ❑ Many large CTT customers with remaining humidifier orders

❑ Max content – Only via penetration and rate increase

Boeing 777X

- ❑ Certification delayed
- ❑ Boeing reiterated EIS late 2023

❑ Max content – Only via penetration and ramp-up

MC-21 Paused

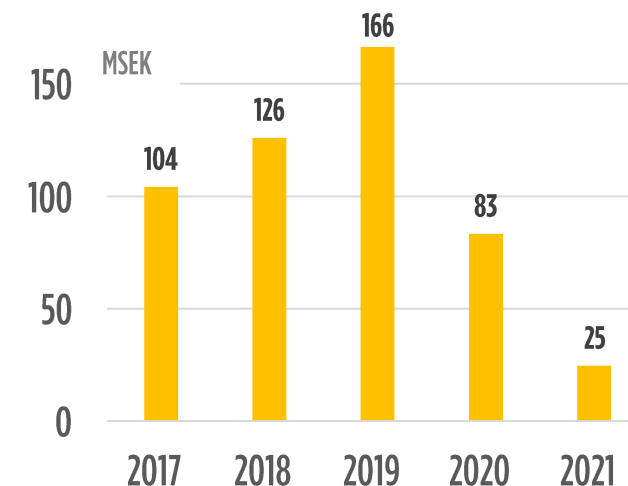
- ❑ Type certificate Russia in December 2021
- ❑ Targeted EIS in Q3 2022











❑ Basic – Only ramp-up and more content

OEM opportunity road-map

Higher selection – Higher a/c production rate – More content – New programs

- ❑ Boeing 787 humidification SFE for business class – cabin performance equal to A350 / 777X
- ❑ Boeing 737 MAX – A321 Family incremental upgrade opportunities
- ❑ New aircraft models (Boeing NMA)

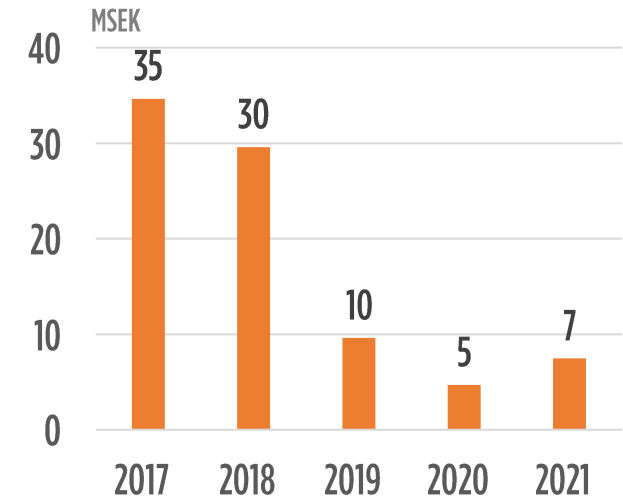


	More content	Higher selection		More content	Incremental upgrades - New Programs		
Passenger cabin	↑			↑	Airbus A321LR/XLR	CRAIC CR929	Boeing NMA
Flight deck				 Paused	Airbus A321LR/XLR	CRAIC CR929	Boeing NMA
Crew rests				↓		CRAIC CR929	
Anti-Condensation				↓	Airbus A321 Family Boeing 737 MAX	CRAIC CR929	Boeing NMA

The anti-condensation opportunity

Moisture protection market driven by sustainability and oil at 13 year high

- ❑ Anti-Fuselage-Condensation (A320 / Boeing 737)
- ❑ Boeing MAX – Efforts to obtain STC for Boeing 737 MAX



Focus on European airlines
- Sustainability – Strong prospect list

Jet2.com

- ❑ Ordered 51 A321 aircraft scheduled to be delivered 2023-

pobeda ●●●●

Paused

- ❑ Order for 20 a/c in Q4 scheduled for retrofit in 2022 – Shipments paused
- ❑ (Opportunity: 20 more a/c scheduled to be added to Pobeda fleet in 2022 / 2023)



The cabin humidification opportunity

Air quality and health in focus - Benefit versus cost compelling – Driven by wellbeing and wellness

- ❑ Growing airline interest in cabin air quality / humidity / wellness
- ❑ Short-term limited number of refurbishment programs
- ❑ Projects conditional on re-start of intercontinental travel

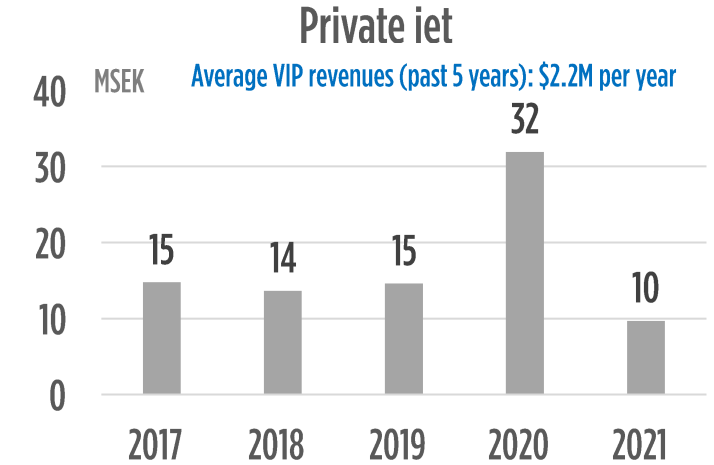
- ❑ Retrofit opportunity: 1,000 Boeing 787 aircraft
- ❑ Humidification system for the business class at a cost <50% of the cost to retrofit 1 new business class suite



The private jet opportunity

Dominating the widebody VIP segment – Poised to grow into large cabin bizjet segment

- ❑ Widebody VIP and narrowbody VIP markets are not growing
- ❑ Narrowbody penetration higher is a growth opportunity
- ❑ Large cabin business jets is a new segment with huge potential



#1 Airbus ACJ320 business agreement

Higher penetration on ACJ320 – Standard for climate and bolt-on-kit

- ❑ Cooperation with Airbus ACJ to offer optimized humidification for the ACJ320 VIP Family
- ❑ Promoted by Airbus
- ❑ Bolt-on-kit delivery – More scalable vs VIP projects together with completion centers

	Completion projects	OEM project	Kit + STC	Addressable Market (per year)	Entry-into-Service
ACJ320	✓	✓	✓	\$1.5M	In-service



#2 The ACJ TwoTwenty business jet opportunity



BREAKING AWARD

CTT selected by ACJ to develop IFH for TwoTwenty aircraft

RECENT NEWS

CTT
SYSTEMS

08.00 2022-03-17

Airbus Corporate Jets selects CTT to develop Inflight Humidification system for the ACJ TwoTwenty aircraft

#3 Large-cabin bizjet market is a huge opportunity

OEMs are key – Strong references in VIP to successfully migrate in large cabin bizjets

- ❑ Large-cabin, long-range business jets - 50 – 100 a/c per year
- ❑ Long-range (10+ hours) – Equipped for best comfort – Humidification system required



❑ Addressed Market potential: \$13M per year

	Completion projects	OEM project	Kit + STC	Addressable Market (per year)	Entry-into-Service
Bombardier Global 7500	✓			\$10M	In-service
ACJ TwoTwenty		✓	✓	\$3M	2023

BREAKING NEWS: Selected



❑ Unaddressed market: \$15M per year

The freighter opportunity

OEM is key but also opportunities in P2F programs and retrofit installations

- ❑ Freighter OEM: A350F launched with EIS 2025 – Boeing 777XF launched in Q1 2022
- ❑ Passenger-to-freighter conversion programs (P2F)
- ❑ Retrofit modern air cargo aircraft: Boeing 777F and Boeing 767F

❑ Addressed Market potential:
\$2.5M - \$5M per year

NEW



Market drivers stronger in the wake of the pandemic

Focus on air quality and wellness – Demand for green tech to reduce carbon footprint



Leading position and projects for growth – Power to invest



Q & A



